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AUTOMATICS FOR CONSTANT-FLOW PRODUCTION

V.V. Kalliopin

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The Model 7S2 automatic for constant-flow production has been built for an automatic transfer machine line to be used at a motor vehicle plant.

The automatic machines edges of steel sheets up to 12 millimeters thick and $580 \times 1,880$ millimeters in size. Its function is to plane edges to an accuracy of hundredths of a millimeter and to bevel the edge to specified angles. The steel sheets are fed to the automatic in packets of 25.

Electrical contact instruments on the automatic check the width of the sheet after machining to an accuracy of 0.02 millimeters. If the size is not within this limit, the machine tool stops by an impulse received from the instrument. Such an arrangement was set up in the event of premature tool wear or in the event of tool breakage.

The productivity of the automatic is at least 80 sheets per hour and if necessary can be increased to 120. This productivity is achieved at the comparatively low cutting speed of 7 meters per minute.

Chips are removed from the cutting zone by means of a conveyer. The automatic is equipped with an A-71-4 electric motor having a speed of 1,450 rpm.

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Another automatic which machines parts on the constant-flow principle is the Model OT. The automatic is intended for cutting off the ends of pipes up to 35-50 millimeters in diameter. Pipes of different lengths are fed into the automatic, one after the other, in a constant flow. Its special feature is that it can process long pipes.

Complete unification of the right and left beds and columns of the machine tool has been incorporated into its design. This has considerably reduced the cost of its manufacture.

The productivity of the automatic with a feed of 1,000 millimeters per minute reaches 1,080 trimmed pipes per hour. In machining pipes made of light alloys at a feed of 2,000 millimeters per minute, its productivity can be

The cutters are powered by AO-42-2 individual electric motors with a power of 2.8 kilowatts and speed of 2,880 $\rm rpm$.

The Model GF-179 milling machine, which machines a bar from two sides by a method of milling with an end mill, is similar in design.



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